

REMEDIAL SITE ASSESSMENT DECISION – EPA Region 03

Site Name: JOSEPH SMITH AND SONS

Alias(es):

City: CAPITOL HEIGHTS County or Parish: PRINCE GEORGE'S

State: MD

Refer to Report Dated: 07/29/2010

EPA ID: MD0000208181

Report Developed By: STATE

State ID: MD-485

Report Type: Site Inspection #001

Decision Date: 02/06/2017

- ☒ 1. Further Remedial Site Assessment Under CERCLA (Superfund) is not required because: NFRAP-Site does not qualify for the NPL based on existing information
- ☐ 2. Further Assessment Needed Under CERCLA.
- ☐ 3. Remedial study/cleanup needed.

Decision/Rationale:

Joseph Smith and Son's is an approximate 16-acre metal recycling yard situated in an industrial area of Prince George County and is located along Beaverdam Creek near its confluence with the Anacostia River in the Capitol Heights area of Maryland. The facility is bounded to the north by railroad lines, to the west by Kenilworth Avenue, and to the south by Beaverdam Creek. It is comprised of metal processing equipment and piles of processed and unprocessed metal debris. Scrap metal recycling of ferrous and non-ferrous metals has occurred on the Joseph Smith property since 1950 and has had a history of environmental releases. The Maryland Department of the Environment assessed the site as a component in a larger watershed initiative due to its potential to release contaminants to the Beaverdam Creek and is closely related to the Beaverdam Creek PCB site (MD0001095439). The Beaverdam Creek PCB site includes surface water and sediment investigations in the downstream section of Beaverdam Creek where Joseph Smith and Son's is located and a 95-acre stretch of land upstream in the Landover Hills-area of Prince George's County. The upstream section was evaluated to characterize that section of Beaverdam Creek and identify potential sources contributing to the downstream sections contaminated with PCBs. The assessment of the upstream area was also done to serve as the site inspection of both the Joseph Smith site and the Beaverdam Creek PCB site.

Environmental History

The site was initially identified for pre-remedial assessment as a result of a citizen complaint of a petroleum release to the ground that was later determined to contain polychlorinated biphenyls (PCBs). In 1987, Joseph Smith and Son's entered into a Consent Order and Agreement with MDE due to the unpermitted discharge of pollutants to Beaverdam Creek. In 1994, a preliminary assessment and background investigation on PCB contamination in Beaverdam Creek itself was completed and determined that PCB's were present in the sediments of the creek adjacent to Joseph Smith and Son's, although the source could not be determined. Also, in 1994 EPA performed a multi-media compliance inspection of Joseph Smith's during which samples of shredder fluff were collected and later found to contain PCBs in excess of 50 parts per million.

In January 1998, a private citizen reported an oil spill at the Joseph Smith and Son's site. The US Coast Guard responded with EPA as the lead agency. Soil and surface water samples were collected from the spill and it was determined that a petroleum spill did occur but did not reach navigable waters, thus no action was taken. Low level PCB contamination was again documented in the samples collected from the site. Responsibility to characterize and delineate the area of contamination was left to the owners/operators of the site.

In December 2004, the MDE conducted another preliminary assessment of the site through its pre-remedial cooperative agreement with EPA, which reviewed the results of previous investigations. The assessment determined PCBs to be present in the soil and sediment at Joseph Smith's and the adjacent surface water but most detections failed to exceed risk based screening levels and a source of contamination to surface water could not be attributed to Joseph Smith's. It was determined that further investigation of the surface water pathway was needed, due to the ecological and human food chain threat posed by PCBs in the surface water.

Pathways and Exposure

To further assess the surface waters at Joseph Smith's, the April 2010 site inspection focused on a 95-acre stretch of Beaverdam Creek, approximately 2.5-miles upstream. The study area is located in the Anacostia River Drainage Basin, in the vicinity of Landover Road, Landover Hills, MD. Beaverdam Creek flows for 2.3 miles from this area to its confluence with the Anacostia River, including the section that is adjacent to Joseph Smith and Sons. The Anacostia River flows for 6.7 miles before converging with the Potomac River. The 15-mile surface water target distance limit ends approximately 6-miles downstream of the Potomac-Anacostia River confluence. There are no surface water intakes located within the 15-mile distance limit, therefore, the primary threat to surface water is ecological and via the human food chain. Recreational fishing does occur on the Anacostia, however, it is unknown if it occurs on Beaverdam Creek itself. Stormwater outfalls are located throughout the entire length of the study area.

Eleven sediment and surface water samples were collected to evaluate the surface water migration pathway. The samples were tested for total metals, dissolved metals, SVOCs, pesticides, and PCBs. The total metals analysis detected barium, iron, manganese, and mercury in all surface water samples at levels exceeding the EPA Biological Technical Assistance (Continued)

Decision/Rationale (Continued):

Group (BTAG) benchmarks. Aluminum was also detected in one sample at a concentration greater than three times the background sample. Only one SVOC was detected greater than a BTAG standard in the samples collected, however, two other specific SVOCs were found in other samples from varying locations along the creek. There were no pesticides or PCBs detected in the surface water samples.

Sediment samples collected from ten locations transecting Beaverdam Creek revealed several metals at concentrations exceeding BTAG benchmarks, with arsenic being detected at a level greater than three times the background sample. Iron was also significantly elevated in the upstream samples. In fact metals analysis of the upstream samples were generally higher than the downstream locations. SVOCs were detected in the middle to upstream locations. There were no pesticides detected in any sediment sample. PCBs were detected in three middle sample locations greater than the BTAG standards and significantly above background.

There are five domestic groundwater wells within 4-miles of the upstream Beaverdam Creek study area, with the nearest domestic well situated approximately 1-mile from the site. There are no well head protection areas within 4-miles. The groundwater migration pathway is not considered a primary pathway of concern.

The soil exposure pathway is evaluated by primarily considering the proximity of residences, school, and daycares to a release of contamination and the populations that may become exposed to that contamination. There are no residents, schools, or day cares within 200 feet of the site, however, there are several residential, commercial and industrial properties nearby. There are approximately 37,567 residents living within 1-mile of the upstream study area.

The air pathway was not evaluated as part of the site inspection.

Decision

Sample results from the Beaverdam Creek study indicate the water body has been impacted by metals, SVOCs, and PCBs. The highest concentrations of contaminants were detected in the sediments from the mid-point of the study area, near the Landover Metro station and an industrial park along Pennsy Drive. Because PCBs were detected in this section of Beaverdam Creek, upstream of the Joseph Smith and Son's site, it is difficult to attribute the downstream contamination that was found adjacent to Joseph Smith's with any one particular source or Joseph Smith's itself. The upstream study area revealed a higher concentration of contaminants in the sediments near the area of the Landover Metro station and the industrial park where the water is pooled above a low dam. This could be attributable to the low flow of the creek or the clay sediments that were encountered which limit PCB migration. Regardless, there is likelihood that PCB and metals contamination is resulting from an upgradient source near the Pennsy Drive industrial park. Further assessment of Beaverdam Creek and the surrounding businesses that could contribute to contamination in this area is needed and will be performed as an Expanded Site Inspection of the Beaverdam Creek PCB site. As a result, the EPA has determined No Further Remedial Action is Planned (NFRAP) at Joseph Smith and Son's. A NFRAP designation means that no additional remedial steps under the Federal Superfund program will be taken at the site unless new information warranting further Superfund consideration or conditions not previously known to EPA regarding the site are disclosed. In accordance with EPA's decision regarding the tracking of NFRAP sites, the referenced site may be removed from EPA's Active site inventory and placed in a separate Archive site inventory as an historical record if no further Superfund interest is warranted. Archived sites may be returned to the Active site inventory if new information necessitating further Superfund consideration is discovered.

The U.S. Environmental Protection Agency (EPA) has determined that no further remedial action by the Federal Superfund program is warranted at the referenced site, at this time. The basis for the no further remedial action planned (NFRAP) determination is provided below. A NFRAP designation means that no additional remedial steps under the Federal Superfund program will be taken at the site unless new information warranting further Superfund consideration or conditions not previously known to EPA regarding the site are disclosed. In accordance with EPA's decision regarding the tracking of NFRAP sites, the referenced site may be removed from EPA's Active site inventory and placed in a separate Archive site inventory as an historical record if no further Superfund interest is warranted. Archived sites may be returned to the Active site inventory if new information necessitating further Superfund consideration is discovered.

Site Decision Made By: josomeph vitello

Signature: _____

Decision Date: 02/06/2017